

memory based on the remaining [battery] capacity detected by said detector." On page 3, lines 7-9, the Office Action asserts that general controller 211 of Niikawa corresponds to the claim 1 maintain time calculator and specifically refers to col. 13, lines 55-56. This portion of Niikawa relates to calculation of the "available operation time period" of the Niikawa camera. See, for example, col. 13, lines 39-57 and col. 16, lines 8-23. The "available operation time period" is the time period during which the battery voltage V will remain above V_{th} , at which time the camera automatically switches to power-off because stable camera operation no longer is possible. See, for example, col. 1, lines 12-65 of Niikawa. The Niikawa "available operation time period" does not correspond to the claim 1 "maintainable time of the image data maintained in said volatile memory."

As described in Applicant's specification, the power supply voltage V_1 needed to maintain image data in the volatile memory is less than the voltage level V_{min} needed to maintain stable camera operation. The "maintainable time" is different than the "available operation time period" of Niikawa (which corresponds to the "camera enabled time" of Applicant's specification). See, for example, page 10, lines 10-21 of Applicant's specification. Thus, Niikawa does not disclose or suggest the claim 1 "maintain time calculator that calculates a maintainable time of the image data maintained in said volatile memory based on the remaining capacity detected by said detector."

In addition, the "available operation time period" calculated by Niikawa does not even correspond to the time that image data is maintained in the DRAM 209 of Niikawa. The Office Action asserts that DRAM 209 of Niikawa corresponds to the claim 1 volatile memory. However, the "available operation time period" calculated by Niikawa does not correspond to the time that image data is maintained in DRAM 209. As described, for example, at col. 17, lines 11-16 of Niikawa, the power supply to the DRAM 209 can be prohibited before the camera is disabled (that is, before the expiration of the available

operation time period) in order to further conserve power and increase battery life. For this additional reason, Niikawa does not disclose or suggest the claim 1 maintain time calculator.

Furthermore, when Niikawa is modified by Sasaki et al., as is proposed in the Office Action, the resulting system would merely calculate the "available operation time period" until the resulting camera is disabled to avoid unstable camera operation; it would not result in a system that calculates a maintainable time in which image data is maintained in a volatile memory. As disclosed, for example, at col. 10, lines 44-51, Sasaki et al. teaches that the "buffer memory 31₆ is backed up by the battery so that even if the power source switch of the apparatus is turned off, the stored content of the buffer memory 31₆ is kept for a long period of time." However, neither Niikawa nor Sasaki et al. discloses or suggests calculating the maintainable time that image data can be maintained in such a buffer memory. Accordingly, the combination of Niikawa and Sasaki et al. does not disclose or suggest the maintain time calculator of claim 1.

Withdrawal of the rejection of claims 1-4 is requested.

Claim 11 stands rejected under 35 U.S.C. §103(a) over Sasaki et al. in view of Niikawa. This rejection is respectfully traversed.

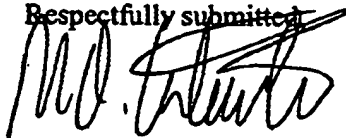
For the reasons discussed above with respect to the rejection of independent claim 1, neither Sasaki et al. nor Niikawa discloses or suggests a "maintain time calculator that calculates a maintainable time of the image data recorded in said volatile memory based on the remaining capacity of the battery detected by said detector," recited in independent claim 11. As noted above, Sasaki et al. clearly teaches maintaining image data in buffer memory 31₆ after power supply to the camera is turned off (col. 10, lines 44-51), and neither Sasaki et al. nor Niikawa discloses or suggests calculating the time that image data in such a buffer memory can be maintained based upon the voltage capacity of a power source.

Accordingly, independent claim 11 is patentable over the combination of Sasaki et al. and Niikawa. Withdrawal of the rejection is requested.

In view of the foregoing, Applicant respectfully submits that this application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicant's undersigned attorney at the telephone number set forth below.

Respectfully submitted



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